

# The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER

01/06/2012

Allison Callahan Assistant District Attorney, Suffolk County

Dear ADA Callahan,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

3.

- 1. Curriculum Vitae for Annie Dookhan and Peter Piro.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #

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- 4. Analysis sheets with custodial chemist's hand notations and test results.
- 5. GC/Mass Spectral analytical data for samples #

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Peter Piro analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely

Annie Dookhan

Chemist

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6622

### Annie Khan (Dookhan)

#### Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry. University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

#### Experience:

2003 - present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs) and Protocols.
- \*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- \*Oversee the Quality Control/Quality Assurance program for the Drug Lab.
- \*Maintenance and repairs of all analytical instruments.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Qualified as an expert witness in Massachusetts Courts and U.S. District Court.
- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- \*Notary Public.

2001 - 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- \*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department for the Food and Drug Administration.
- \*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs).
- \*Trained and supervised new chemists and interns for the department.
- \*Routine QC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, OC and OA of analytical instrumentation.
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

#### **Additional Training:**

Dept. of Justice – Forensics Professionals, (numerous trainings)

GLP/GMP training with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS trainings with Agilent Technologies and Restek.

HPLC and LC/MS/MS trainings with Waters Cooperation.

FTIR training with Spectros.

TOC training with MBL and Sievers.

#### Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

#### Curriculum Vitae

Peter Piro

## **EDUCATION**

Boston Unversity

B.A. in Chemistry and Minor in Biology, 1989

### HONORS

Magna Cum Laude, 3.6 GPA

Graduated with Distinction in Chemistry

Valedictorian of the Chemistry Department

## EXPERIENCE

Department of Public Health/State Laboratory Institute

Chemist III, II, I/ Assistant Analyst

December 1991-Present

Supervise the operation and maintenance of the Gas Chromatography/Mass Spectrometry Laboratory. Analyze controlled substances for State and Federal law enforcement agencies. Qualified as an expert witness in Massachusetts courts and U.S. District Court.

## Massachusetts Health Research Institute

Laboratory Technician

September 1990-December 1991

Researched the seasonal and special occurrences of DSP and PSP in shellfish samples harvested from coastal waters and Georges Bank.

## TRAINING AND ORGANIZATIONS

- \* Completed a six-week training course by senior staff within the Department of Public Health Drug Analysis laboratory.
- \* Appointed Assistant Analyst by the Assistant Commissioner of Public Health in . February 1991.
- \* Elected as a Regular Member to the Northeastern Association of Forensic Chemists on October 27<sup>th</sup> 1995.
- \* Completed training in Mass Spectrometry given by the Food and Drug Administration/Forensic Chemistry Center on November 2002.
- \* Completed training in Mass Spectrometry Troubleshooting and Maintenance, October 25<sup>th</sup> 2002, at Agilent Technologies.
- \* Notary Public since 1993.

CC #_
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BOOK #\_

DRUG RECEIPT

District/Unit		Destruction #	
Name & Rank of Submitting Officer			W) & 19E
			11806
DEFENDANT'S NAME	ADDRESS # STREET	CITY	STATE
		"Rox buney	MA
		Dor.	MA
DRUGS-IMPLEMENTS-AND/OR PARA	APHERNALIA	GROSS QUANTITY	ANALYSIS NUMBER
COCAINE	7,579	100	
COCAINE	8.19	13 9/6	
MARIJUANA	6.8/9	1plb	
			·
	144 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

Prelim: coccura

Date Analyzed:

City: BOSTON D.C.U.

Def:

Am't:

Sub: SUB

Cont:

1 PB

Date Rec: 10/11/2005

**#TESTED:** 

From: P.O. WM. DONNELLY

Gross Wt:

7.57

# Tests: 6ASD

Net Weight: 2.96

FINDINGS ( COM: NR

QUANT:

Prelim: Coccena

Date Analyzed:

11/8/05

City: BOSTON D.C.U.

Def:

Am't:

Sub: SUB

Cont:

13 PB

**#TESTED:** 

Date Rec: 10/11/2005 From: P.O. WM. DONNELLY

Gross Wt:

8.19

# Tests: 24 A-So

FINDINGS:

QUANT:

Prelim: por=2-4

Date Analyzed: 11-07-05 No.

City: BOSTON D.C.U.

Def:

Sub: VM Am't: Cont:

**#TESTED:** 

Date Rec: 10/11/2005 From: P.O. WM. DONNELLY

6.81 Gross Wt:

# Tests: 3950

Net Weight:

MIGOD MACOD

QUANT:

FINDINGS:

AGENCY BOSTON

ANALYST OSO

## PHYSICAL DESCRIPTION:

Of while changed

17186

900000+04 1PG= 3.0613

COba1+ = -,+

Maguis = -

Froehdes: -

Meckes =

Aucl = +

TUTA = - ,+

ms = + cocarie

626

# PRELIMINARY TEST RESULTS

COCAINE

HEROIN

NEGATIVE

OTHER \_\_\_\_\_

DATE 11-4-05

#### FINAL TEST RESULTS

COCÁINE

HEROIN

NEGATIVE

OTHER \_\_\_\_

DATE: 1 1-08-05

## PHYSICAL DESCRIPTION:

10 13 phs

9088Wtas 13pss= 3, 1521

Similar

sposewtos u ps= 1.1068

4 cobait = -, +

4 mangues -

4 Froedhes= 7

4 Meckes=

y Auci = +

4 TLTA = -,+

yms=+ cocarie

929

## PRELIMINARY TEST RESULTS



HEROIN

NEGATIVE

OTHER \_\_\_\_\_

DATE W-US

## FINAL TEST RESULTS



HEROIN

NEGATIVE

OTHER \_\_\_\_

DATE: 1 11-8-05

W	GROSS	PACKET	NET	<b>W</b>	GROSS	PACKET	NET
	WEIGHT	WEIGHT	WEIGHT		WEIGHT	WEIGHT	WEIGHT
1				26			
	0.3231	6.0525	0.2706				
2	4 4 5 7 7			27			
J	0.2577	0.0652	0.1425		*		
J	0.2337	2 2682	0.1655	28			
4	0.233	0.0682	0.1033	29	oppropropropropropropropropropropropropr		
	0.2909	0.0493	0.2416				
5				30	Consequences processes and indicate the survey of the surv		
6			<u>-</u>	31			ļ
-					consponentially.		
7				32			
8	***************************************			33			
				"		distribution of the state of th	
9			·	34	•		
10				35			
11				36			
12				37.			
13	**************************************			38			
14	<b>-</b>			39			
_				-			<u> </u>
15				40			
16				41	***************************************		
					•		
17				42			
18	÷.			43			1
19				44			1
, 3				44			
20		1		45			
				-			
21				46			
22				47			
-				1			
23				48			
24		<u> </u>	<u> </u>	49		· ·	
~				45			
25				50			
				100			

AVERAGE WT. OF PACKETS:	AVERAGE WT. OF POW	DER 0.8702/4 = 0.2175(13
GROSS WEIGHT OF PACKETS AND PO		

TOTAL WEIGHT OF PACKETS (EST.)

NET ESTIMATED POWDER WEIGHT

= 2.8281

PP:10

Information from Data File:

File Name : E:\SYSTEM4\11 07 05\434304.D

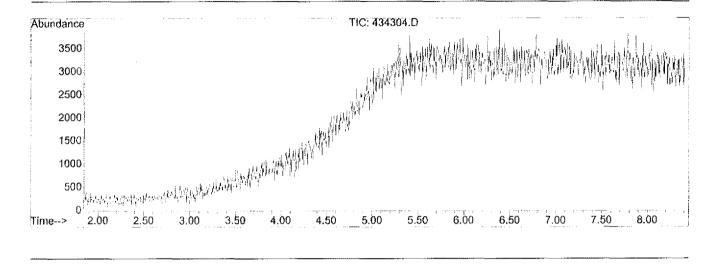
Operator : ASD

Date Acquired : 7 Nov 2005 18:48

Sample Name : BLANK

Submitted by :

Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : E:\SYSTEM4\11\_07\_05\434305.D

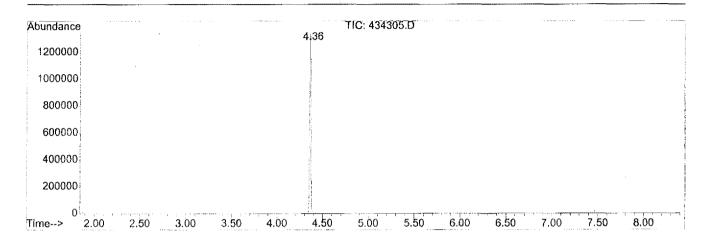
Operator : ASD

Date Acquired : 7 Nov 2005 19:00

Sample Name : COCAINE STD

Submitted by Vial Number

5 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.361	1244426	100.00	100.00

File Name : E:\SYSTEM4\11 07 05\434305.D

Operator : ASD

Date Acquired : 7 Nov 2005 19:00

Sample Name : COCAINE STD

Submitted by :

Vial Number : 5 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

Minimum Quality: 90

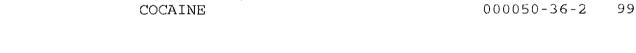
C:\DATABASE\PMW\_TOX2.L

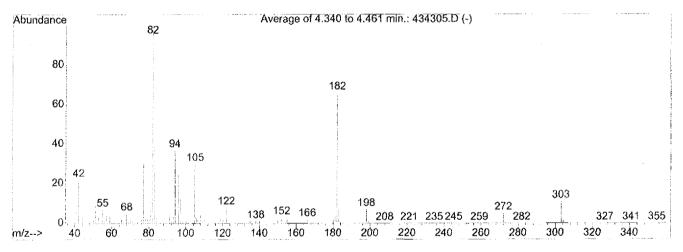
Minimum Quality: 90

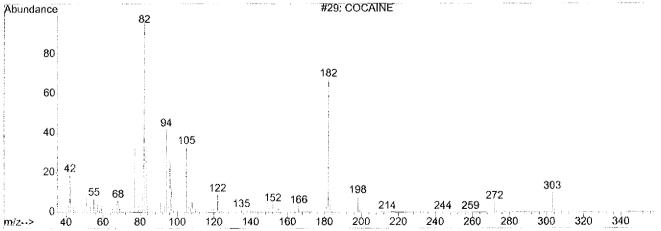
C:\DATABASE\NIST98.L

PK# RT Library/ID CAS# Qual

1 4.36 C:\DATABASE\SLI.L







434305.D

Fri Jan 06 10:05:34 2012

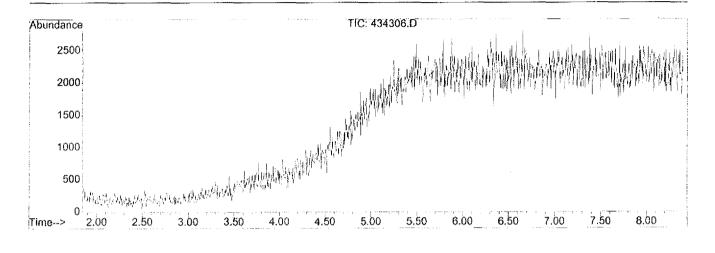
Page 2

File Name : E:\SYSTEM4\11\_07\_05\434306.D

Operator : ASD

Date Acquired : 7 Nov 2005 19:13

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time Area Area % Ratio %

<sup>\*\*\*</sup>NO INTEGRATED PEAKS\*\*\*

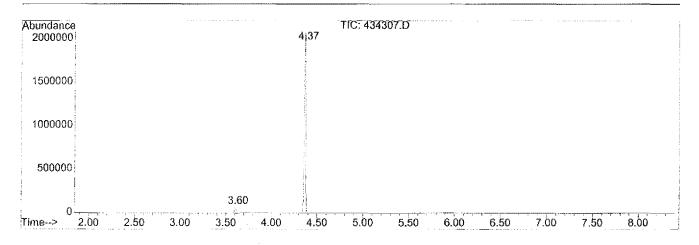
File Name : E:\SYSTEM4\11 07 05\434307.D

Operator : ASD

Date Acquired : <u>7 Nov</u> 2005 19:25

Sample Name Submitted by

: ASD Vial Number AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.603 4.369	= <del>-</del> ·	5.77 94.23	<del>-</del> - <del>-</del>	

File Name : E:\SYSTEM4\11\_07\_05\434307.D

Operator : ASD

Date Acquired : <u>7 Nov</u> 2005 19:25

Sample Name

Submitted by : ASD Vial Number : 7 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

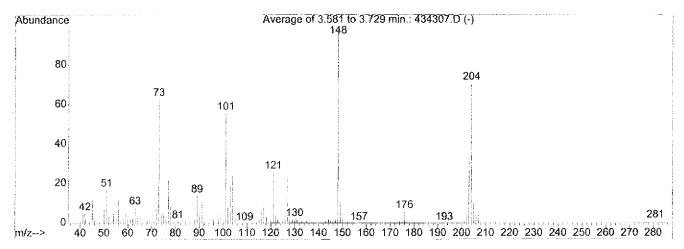
Minimum Quality: 90

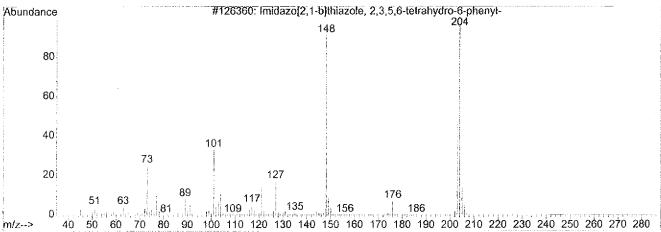
C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

	PK#	RT	Library/ID		CAS#	Qual
-	1	3.60	C:\DATABASE\NIST98.L			0.0
			<pre>Imidazo[2,1-b]thiazole,</pre>			98
			<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	97
			<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	97





434307.D

Fri Jan 06 10:05:44 2012

File Name : E:\SYSTEM4\11 07 05\434307.D

ASD Operator

Date Acquired 7 Nov 2005 19:25

Sample Name Submitted by ASD Vial Number

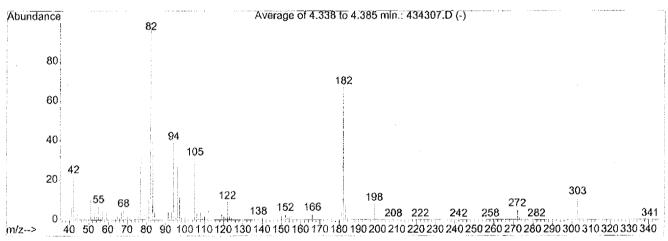
AcquisitionMeth: DRUGS Integrator : RTE

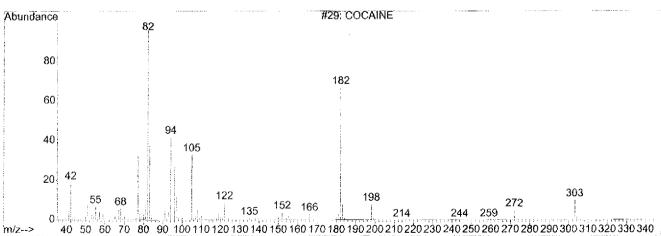
Search Libraries: Minimum Quality: 90 C:\DATABASE\SLI.L

C:\DATABASE\PMW TOX2.L Minimum Quality: 90

C:\DATABASE\NIST98.L

CAS# PK# RT Library/ID Qual C:\DATABASE\SLI.L 2 4.37 99 COCAINE 000050-36-2





434307.D

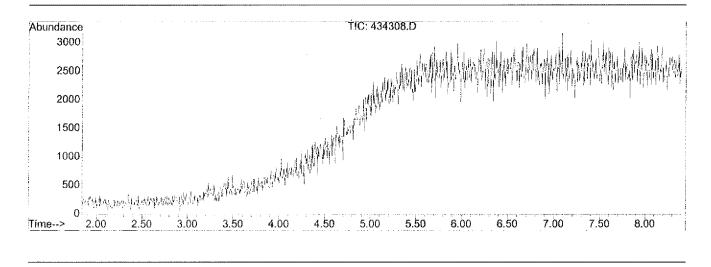
Fri Jan 06 10:05:44 2012

File Name : E:\SYSTEM4\11\_07\_05\434308.D

Operator : ASD

Date Acquired : 7 Nov 2005 19:37

Sample Name : BLANK Submitted by : ASD Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

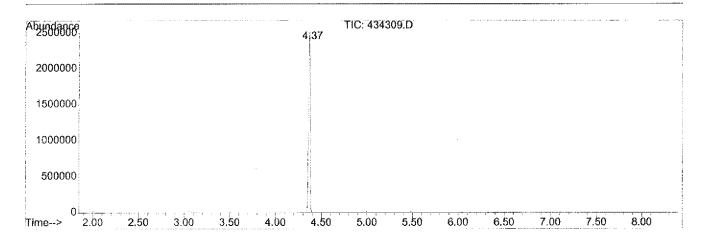
File Name : E:\SYSTEM4\11\_07\_05\434309.D

Operator : ASD

Date Acquired : 7 Nov 2005 19:49

Sample Name :

Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.369	2911755	100.00	100.00

File Name : E:\SYSTEM4\11 07 05\434309.D

Operator : ASD

Date Acquired : 7 Nov 2005 19:49

Sample Name :

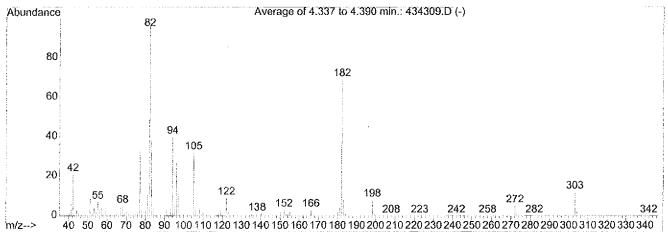
Submitted by : ASD Vial Number : 9 AcquisitionMeth: DRUGS Integrator : RTE

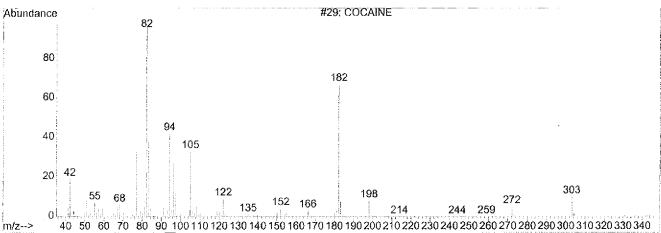
Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90

C:\DATABASE\PMW TOX2.L Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	4.37	C:\DATABASE\SLI.L	000050-36-2	99





434309.D

Fri Jan 06 10:05:54 2012

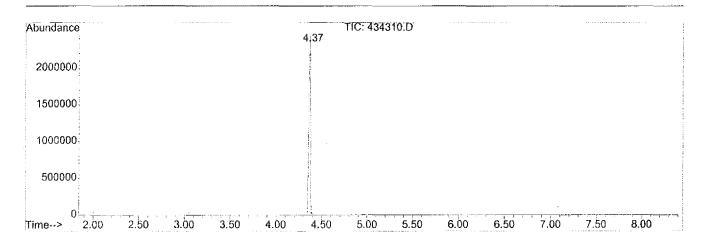
File Name : E:\SYSTEM4\11\_07\_05\434310.D

Operator : ASD

Date Acquired : 7 Nov 2005 20:01

Sample Name :

Submitted by : ASD
Vial Number : 10
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.372	2902881	100.00	100.00

File Name : E:\SYSTEM4\11 07 05\434310.D

Operator : ASD

Date Acquired : \_ 7 Nov 2005 20:01

Sample Name :

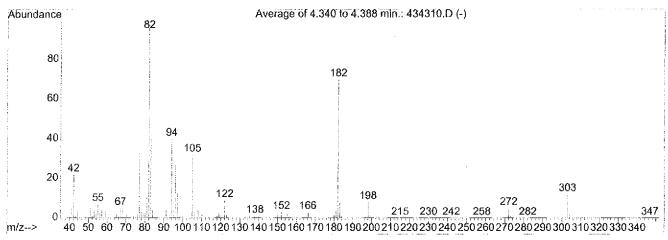
Submitted by : ASD
Vial Number : 10
AcquisitionMeth: DRUGS
Integrator : RTE

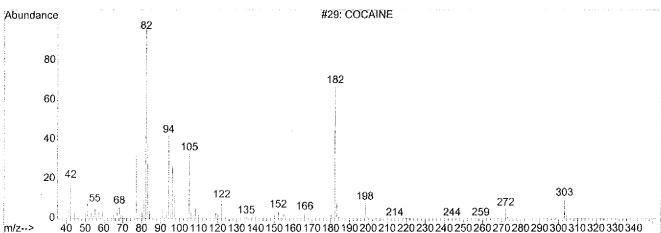
Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90

C:\DATABASE\PMW TOX2.L Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	4.37	C:\DATABASE\SLI.L COCAINE	000050-36-2	99





434310.D

Fri Jan 06 10:05:59 2012

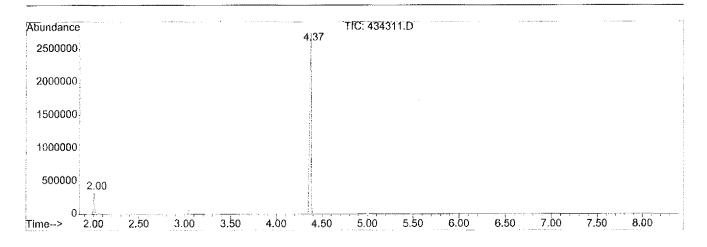
File Name : E:\SYSTEM4\11 07 05\434311.D

Operator : ASD

Date Acquired : \_ 7 Nov 2005 20:13

Sample Name :

Submitted by : ASD
Vial Number : 11
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
2.002 4.372		7.15 92.85		

File Name : E:\SYSTEM4\11 07 05\434311.D

Operator : ASD

Date Acquired : 7 Nov 2005 20:13

Sample Name :

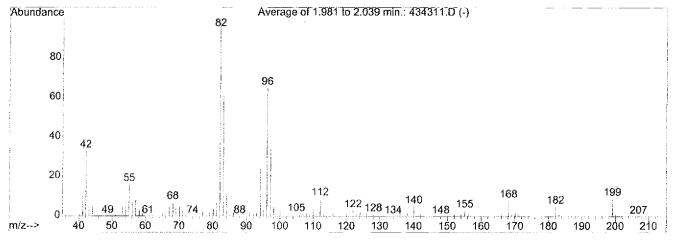
Submitted by : ASD
Vial Number : 11
AcquisitionMeth: DRUGS
Integrator : RTE

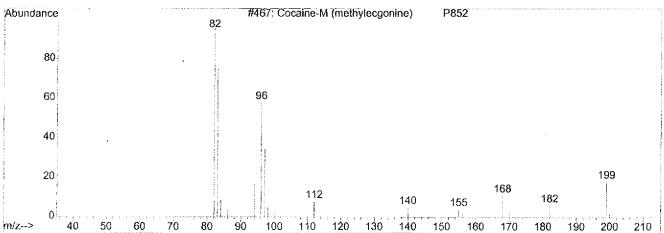
Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90

C:\DATABASE\PMW TOX2.L Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
 1	2.00	C:\DATABASE\PMW_TOX2.L		
		Cocaine-M (met $\overline{ ext{h}}$ ylecgonine)	007143-09-1	96
		Cocaine	000050-36-2	38
		Tilidine-M (nor-)	038677-94-0	9





434311.D

Fri Jan 06 10:06:04 2012

File Name : E:\SYSTEM4\11 07 05\434311.D

Operator : ASD

Date Acquired : 7 Nov 2005 20:13

Sample Name :

Submitted by : ASD
Vial Number : 11
AcquisitionMeth: DRUGS
Integrator : RTE

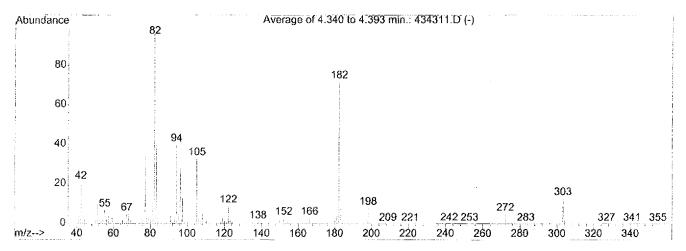
Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90

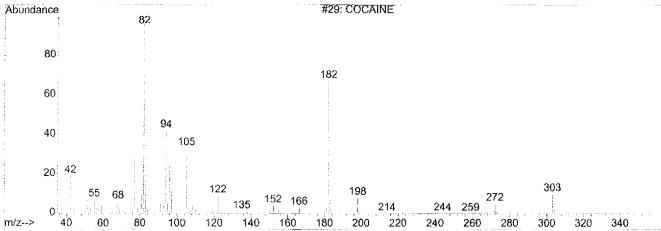
C:\DATABASE\PMW TOX2.L Minimum Quality: 90

C:\DATABASE\NIST98.L

PK# RT Library/ID CAS# Qual

2 4.37 C:\DATABASE\SLI.L COCAINE 000050-36-2





434311.D

Fri Jan 06 10:06:05 2012

Page 3

99

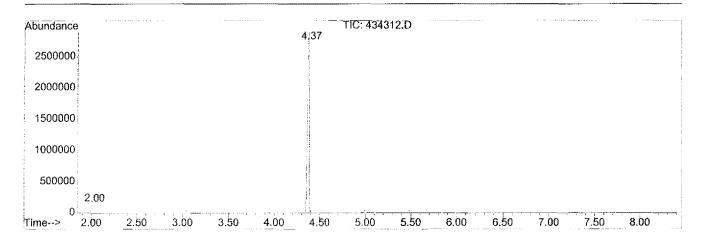
File Name :  $E:\SYSTEM4\11_07_05\434312.D$ 

Operator : ASD

Date Acquired : 7 Nov 2005 20:26

Sample Name :

Submitted by : ASD
Vial Number : 12
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
2.002 4.372		3.20 96.80		

File Name : E:\SYSTEM4\11\_07\_05\434312.D

Operator : ASD

Date Acquired : 7 Nov 2005 20:26

Sample Name :

Submitted by : ASD
Vial Number : 12
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

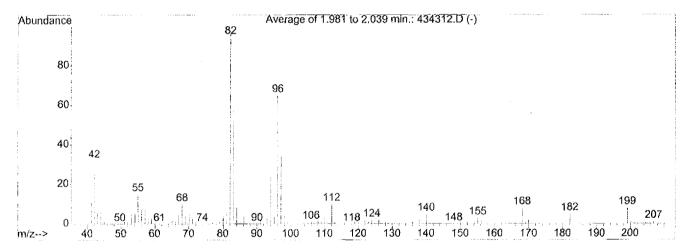
Minimum Quality: 90

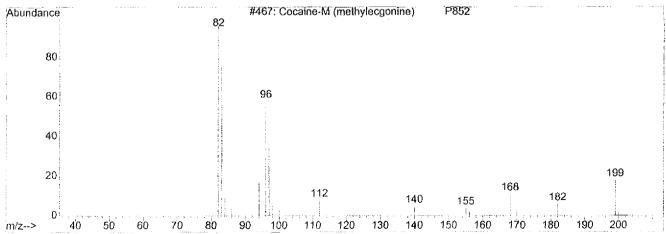
C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID		CAS#	Qual
1	2.00	C:\DATABASE\PMW_TOX2.L Cocaine-M (methylecgonine) Cocaine-M (methylecgonine) Selegiline	AC	007143-09-1 000000-00-0 014611-51-9	91 9 9





434312.D

Fri Jan 06 10:06:10 2012

Page 2

File Name : E:\SYSTEM4\11 07 05\434312.D

Operator : ASD

Date Acquired : 7 Nov 2005 20:26

Sample Name :

Submitted by : ASD
Vial Number : 12
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

Minimum Quality: 90

C:\DATABASE\PMW\_TOX2.L

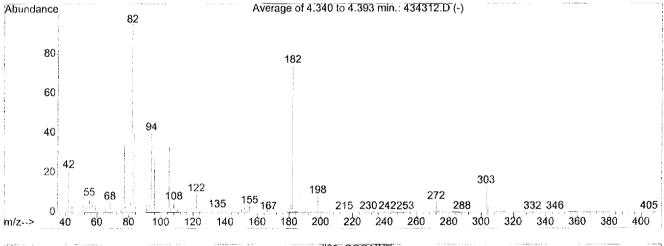
Minimum Quality: 90

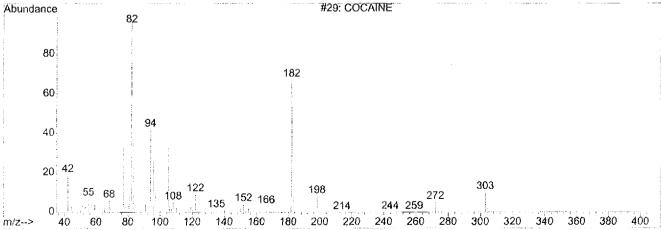
C:\DATABASE\NIST98.L

PK# RT Library/ID CAS# Qual

2 4.37 C:\DATABASE\SLI.L

COCAINE 000050-36-2 99





434312.D

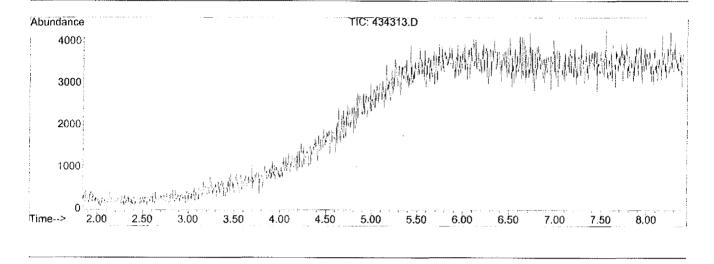
Fri Jan 06 10:06:10 2012

File Name : E:\SYSTEM4\11 07 05\434313.D

Operator : ASD

Date Acquired : 7 Nov 2005 20:38

Sample Name : BLANK Submitted by : ASD Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : E:\SYSTEM4\11 07 05\434321.D

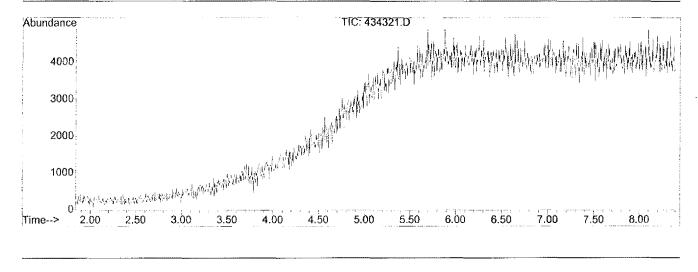
Operator : ASD

Date Acquired : 7 Nov 2005 22:15

Sample Name : BLANK

Submitted by :

Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time Area Area % Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : E:\SYSTEM4\11\_07\_05\434322.D

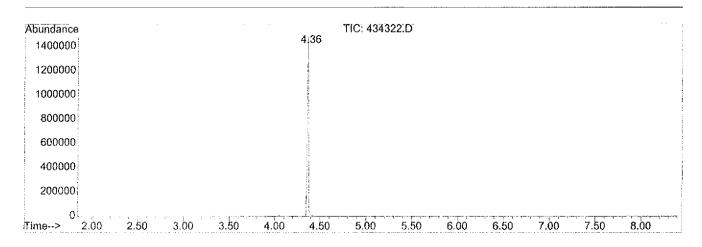
Operator : ASD

Date Acquired : 7 Nov 2005 22:28

Sample Name : COCAINE STD

Submitted by

Vial Number : 22 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.361	1360333	100.00	100.00

File Name : E:\SYSTEM4\11\_07\_05\434322.D

Operator : ASD

Date Acquired : 7 Nov 2005 22:28

Sample Name : COCAINE STD

Submitted by :

Vial Number : 22 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

COCAINE

Minimum Quality: 90

000050-36-2

C:\DATABASE\PMW\_TOX2.L

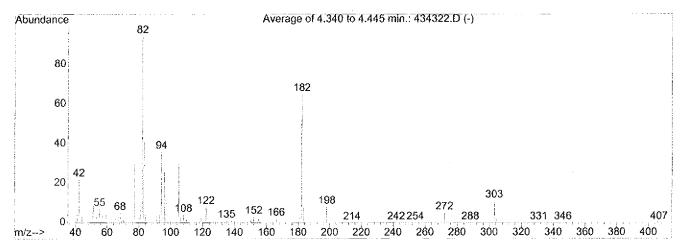
Minimum Quality: 90

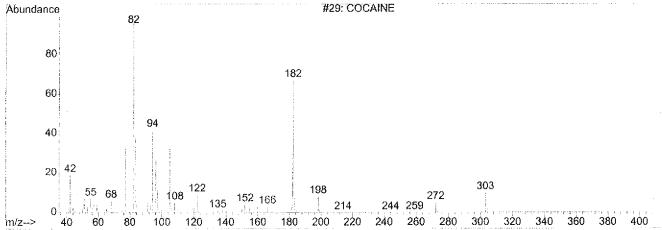
99

C:\DATABASE\NIST98.L

PK# RT Library/ID CAS# Qual

1 4.36 C:\DATABASE\SLI.L





434322.D

Fri Jan 06 10:06:27 2012